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**Urnov et al.**(10) **Pub. No.: US 2014/0086885 A1**(43) **Pub. Date: Mar. 27, 2014**(54) **METHODS AND COMPOSITIONS FOR  
TARGETED CLEAVAGE AND  
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1, 2004.(71) Applicant: **C/O SANGAMO BIOSCIENCES,  
INC., (US)**(72) Inventors: **Fyodor Urnov**, Richmond, CA (US);  
**Michael C. Holmes**, Richmond, CA  
(US); **Jeffrey C. Miller**, Richmond, CA  
(US); **Carl O. Pabo**, Richmond, CA  
(US)(73) Assignee: **C/O SANGAMO BIOSCIENCES,  
INC., Richmond, CA (US)**(21) Appl. No.: **13/837,027**(22) Filed: **Mar. 15, 2013****Related U.S. Application Data**(63) Continuation of application No. 12/804,234, filed on  
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Disclosed herein are methods and compositions for targeted cleavage of a genomic sequence, targeted alteration of a genomic sequence, and targeted recombination between a genomic region and an exogenous polynucleotide homologous to the genomic region. The compositions include fusion proteins comprising a cleavage domain (or cleavage half-domain) and an engineered zinc finger domain and polynucleotides encoding same. Methods for targeted cleavage include introduction of such fusion proteins, or polynucleotides encoding same, into a cell. Methods for targeted recombination additionally include introduction of an exogenous polynucleotide homologous to a genomic region into cells comprising the disclosed fusion proteins.